IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended)A method for forming a hierarchical structure of representative images for use in editing a motion picture, wherein said hierarchical structure including a plurality of representative images is displayed on a screen of a display device, each of said representative images represents a series of frame images forming said motion picture, said method of forming a hierarchical structure comprising the steps of;

selecting first representative images representing a series of said frame representative images;

designating by a user a feature of a predetermined object to be detected in a frame image of the representative images;

performing an image detection processing for detecting ~~a~~ said predetermined object based on said feature from a series of frame images corresponding to said selected first representative images;

displaying first information showing that said predetermined object is included in a series of said frame images on said screen, as a result of said image detection processing

displaying second information showing that said image detection processing has not been performed vet in a series of said frame images; and

forming said hierarchical structure based on said first representative images corresponding to a series of said frame images within which said predetermined

object has been detected.

2. (previously presented) A method according to claim 1, wherein in the step of displaying said first information, said frame images including said predetermined object and said frame not including said predetermined object are distinctively displayed.

3. (previously presented) A method according to claim 1, wherein said image detection processing is performed based on one or more features possessed by said predetermined object,

4. (previously presented) A method according to Claim 1, wherein said predetermined object is the image of an object appearing in said motion picture.

5. (previously presented) A method according to Claim 1, further comprising a step to deleting a part of said first information on said screen.

6. (previously presented) A method according to Claim 1, further comprising a step of:

performing separately plural image detection processings on the basis of different features for predetermined objects, and displaying in combination of results of said plural image detection processings on said screen.

Claims 7 and 8 (canceled).

9. (previously presented) A method according to Claim 1, further comprising a step of:

displaying, said representative image combined with additional information which relates to said predetermined object detected by said image detection processing, on said screen.

10. (previously presented) A method according to Claim 1, further comprising a step of:

varying a display area of said first information on said screen.

11. (previously presented) A method according to Claim 1, further comprising a the steps of:

selecting one of said representative images constructing said hierarchical structure;

applying said image detection processing to a series of frame images corresponding to said selected representative image,

wherein the results of said image detection processing are included in said representative images arranged at the lowest position of said hierarchical structure.

12. (previously presented) An image information displaying method according to Claim 1, wherein said representative image is displayed in multi-layers form of a series of frame images on said screen, and said frame images containing said predetermined object detected in said image detection processing and said

frame images containing no said predetermined object are distinctively displayed on a side face portion of said multi-layers form.

13. (previously presented) An image information display method according to claim 1, further comprising a step of:

displaying three windows simultaneously on said screen, said three windows including a first window which displays said hierarchical structure to edit the motion picture, a second window which displays the selected first representative images applied said image detection processing, and a third window which displays the detection result of said image detection processing corresponding to said the selected first representative images.

14. (previously presented) An image information displaying method according to Claim 13, wherein said representative images are displayed in said first window with an image size so that said hierarchical structure formed by said representative images can be displayed in said first window, and the displayed representative image is designated by the GUI so that said image detection processing is applied to the designated representative image.

Claims 15 and 16 (canceled).

17. (previously presented) An image information displaying method for editing a motion picture, wherein a representative image representing a series of frame images forming the motion picture is displayed on a screen of a display device

and a hierarchical structure based on a plurality of the representative images is displayed on said screen, said method comprising the steps of:

selecting first representative images in each of which a predetermined object to be detected is included, from said representative images based on an image detection processing;

displaying a first information relating to said representative images including said first representative images, to which said image detection processing has been performed, on said screen; and

displaying a second information relating to said representative images, to which said image detection processing has not been performed, yet, with said first information, simultaneously, on said screen,

wherein said image detection processing comprises the steps of:

displaying an object frame on the detected predetermined object, said object frame designating a part of a selected frame image which contains said predetermined object,

making the judgment of whether or not the same image information as image information of a region enclosed by said object frame is included in the plurality of frame images applied to said image detection processing, and

changing at least one of the size and position of said object frame by l operating icons displayed on said screen.

18. (currently amended)An image information displaying apparatus for editing a motion picture, comprising:

a display device having a screen for displaying representative images

representing a series of frame images forming the motion picture;

a control device for controlling image information displayed on said screen;

a storage device for storing said frame images, said image information and data for managing said frame images and said image information; and

an input device for inputting data into said control device,

wherein said control device comprises:

means for selecting first representative images representing a series of said frame images;

means for designating by a user a feature of a predetermined object to be detected in a frame image of the representative images;

means for performing an image detection processing for detecting ~~a~~ said ~~predetermine~~ predetermined object based on said feature from a series of frame images corresponding to said selected first representative images:

means for displaying a first information showing that said predetermined object is included in a series of said frame images on said screen, as a result of said image detection processing and displaying a second information showing that said image detection processing has not been performed yet in a series of said frame images; and

means for forming said hierarchical structure based on said first representative images corresponding to a series of said frame images which said predetermined object have been detected.

19. (currently amended)A computer program embodied on a computer readable medium for the display of image information for editing a motion picture,

said computer readable medium having computer readable program code means comprising:

means for selecting first representative images representing a series of said frame images;

means for designating by a user a feature of a predetermined object to be detected in a frame image of the representative images;

means for performing an image detection processing for detecting ~~a~~ said predetermined object based on said feature from a series of frame images corresponding to said selected first representative images;

means for displaying a first information showing that said predetermined object is included in a series of said frame images on said screen, as a result of said image detection processing and displaying a second information showing that said image detection processing has not been performed, yet, in a series of said frame images; and

means for forming said hierarchical structure based on said first representative images corresponding to a series of said frame images which said predetermined object have been detected.

20. (currently amended)A method of displaying for editing a motion picture, wherein a hierarchical structure based on a plurality of representative images is displayed on a screen of a display device, each of which represents a series of frame images forming said motion picture, said method comprising the steps of:

selecting representative images representing a series of said frame images;

designating by a user a feature of a predetermined object to be detected in a

frame image of the representative images;

performing an image detection processing for detecting saida predetermined object based on said feature from a series of frame images corresponding to said selected first representative images;

displaying said predetermined object;

displaying a first information showing that said predetermined object is included in a series of said frame images on said screen, as a result of said image detection processing; and

displaying a second information showing that said image detection processing has not been performed yet in a series of said frame images.

21. (previously presented) An image information displaying method for editing a motion picture, wherein a hierarchical structure based on a plurality of representative images is displayed on said screen of a display device, each of which represents a series of frame images forming said motion picture, said method comprising the steps of:

selecting first representative images representing a series of said frame images;

performing an image detection processing for detecting a predetermined object from a series of frame images corresponding to said selected first representative images;

displaying a first information showing that said predetermined object is included in a series of said frame images on said screen, as a result of said image detection processing; and

displaying a second information showing that said image detection processing has not been performed yet in a series of said frame images;

wherein said image detection processing includes:

a step of displaying an object frame on the detected predetermined object, said object frame designating a part of a selected frame image which contains said predetermined object;

a step of making the judgment or whether or not the same image information as image information of a region enclosed by said object frame is included in the plurality of frame images applied to said image detection processing; and

a step of changing at least one of the size and position of said object frame by operating icons displayed on said screen.